Small Business Innovation Research/Small Business Tech Transfer

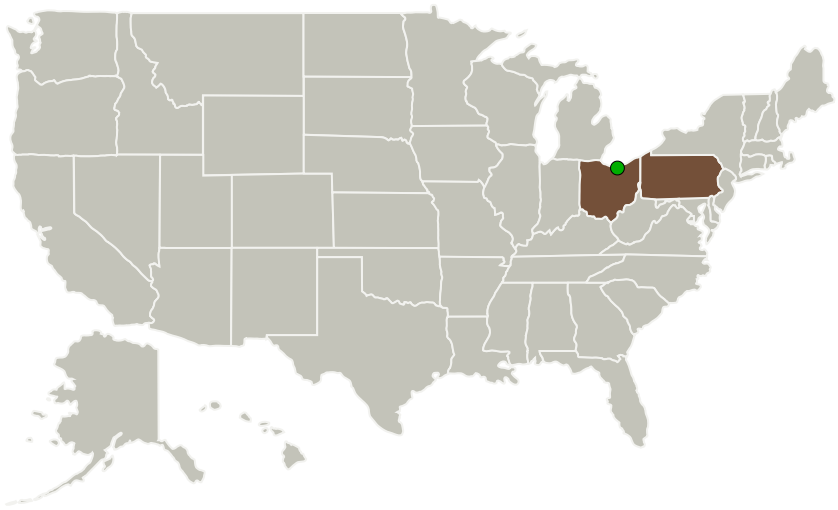
Striction-based Power Monitoring in Space Environment, Phase II

Completed Technology Project (2014 - 2018)

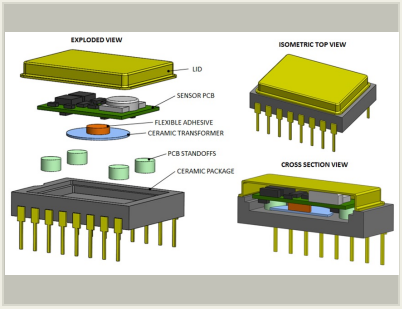
Project Introduction

The program delivers a completely new technology solution to isolation and sensing of power flow (current and voltage). Based on striction materials technology, these small isolation and sensing devices replace Opto-isolation, Hall-effect and Magnetic Transformer isolation and sensing with a lower cost and lower risk solution. The elimination of optical, processor and magnetic components in the design means that these devices are inherently both rad hard and EMI immune. The technology provides superior voltage isolation (ground loop elimination) in a smaller package size. They also will be capable of reliably operating over significantly wider temperature ranges (-55C to 200C) than is readily available to most NASA missions.

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
QorTek Inc	Lead Organization	Industry Small Disadvantaged Business (SDB)	Williamsport, Pennsylvania
Glenn Research Center(GRC)	Supporting Organization	NASA Center	Cleveland, Ohio



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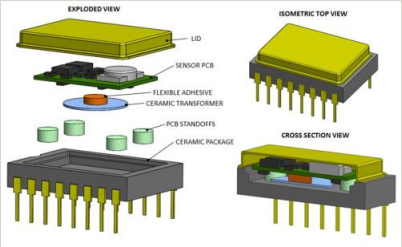
Primary U.S. Work Locations	
Ohio	Pennsylvania

Images



Briefing Chart Image
Striction-based Power Monitoring in Space Environment, Phase II
(https://techport.nasa.gov/image/131040)

Organizational Responsibility

Responsible Mission Directorate:
Space Technology Mission Directorate (STMD)

Lead Organization:
QorTek Inc

Responsible Program:
Small Business Innovation Research/Small Business Tech Transfer

Project Management

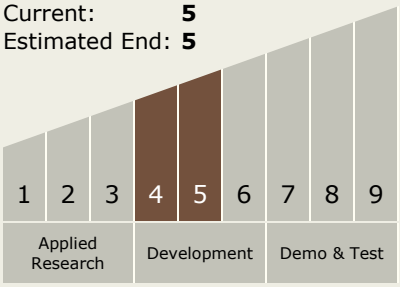
Program Director:
Jason L Kessler

Program Manager:
Carlos Torrez

Principal Investigator:
Gareth J Knowles

Technology Maturity (TRL)

Start: **4**
Current: **5**
Estimated End: **5**



Striction-based Power Monitoring in Space Environment, Phase II

Completed Technology Project (2014 - 2018)

Technology Areas

Primary:

- TX03 Aerospace Power and Energy Storage
  - TX03.3 Power Management and Distribution
    - TX03.3.1 Management and Control

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System